AMENDMENTS TO THE SPECIFICATION

Please the specification as indicated below:

Please replace the paragraph appearing at page 5, lines 19-20, with the following paragraph:

FIGS. 1A-1D depicts the nucleotide sequence of the porcine leptin gene (SEQ. ID NO: 1) and, though not as a continuous sequence or translation, the ordering of nucleotides present in the nucleotide sequence (SEQ ID NO: 2)of the coding region of the porcine leptin gene and the ordering of amino acids present in the nucleotide sequence (SEQ ID NO: 3) of the coding region of the porcine leptin gene ~~the amino acid translation of the porcine leptin coding sequences (SEQ. ID NO: 1, SEQ ID NO: 2, and SEQ ID NO: 3)~~.

Please replace the paragraph appearing at page 5, line 20, through page 6, line 1, with the following paragraph:

FIG. 2 depicts the nucleotide sequence (SEQ ID NO: 2) and the amino acid translation (SEQ ID NO: 3) of the coding region of the entire porcine leptin cDNA (i.e., signal peptide and secreted protein) ~~(SEQ ID NO: 2 and SEQ ID NO: 3)~~.

Please replace the paragraph appearing at page 6, lines 2-3, with the following paragraph:

FIG. 3 depicts the nucleotide sequence (SEQ ID NO: 4) and the amino acid translation (SEQ ID NO: 5) of the porcine leptin cDNA corresponding to the secreted porcine leptin protein ~~(SEQ ID NO: 4 and SEQ ID NO: 5)~~.

Please replace the paragraph appearing at page 6, lines 4-6, with the following paragraph:

FIG. 4 shows a comparison of the porcine leptin cDNA sequence corresponding to the entire porcine leptin cDNA (SEQ. ID NO. 1) with [[the]] a human ~~murine~~ (SEQ ID NO: 6) ~~(SEQ ID NO: 8)~~ leptin sequence and a murine ~~human~~ (SEQ ID NO: 7) leptin sequence ~~sequences~~.

Please replace the paragraph appearing at page 7, line 15, through page 8, line 1, with the following paragraph:

The polypeptide of this invention has an amino acid sequence as best depicted in ~~FIGS. 1A-1D and~~ FIG 2 (SEQ ID NO: 3), and preferably as depicted in FIG. 3 (SEQ ID NO: 5). Also intended within the scope of the present invention is any polypeptide having at least about 8 amino acids present in the above-mentioned sequence. Sequences of this length are useful as antigens and for making immunogenic conjugates with carriers for the production of antibodies specific for various epitopes of the entire protein. Such polypeptides are also useful in screening such antibodies and in the methods of the present invention directed to detection of the leptin protein in biological samples. It is well-known in the art

that polypeptides of about 8 amino acids are useful in generation of antibodies to larger proteins of biological interest.

Please replace the paragraph appearing at page 11, lines 2-13, with the following paragraph:

The present invention is also directed to an RNA molecule (or an allelic variant thereof) comprising a mRNA sequence encoding the polypeptide of this invention, or a functional derivative thereof, and the antisense RNA (or a fragment thereof) of the mRNA. The antisense RNA is, of course, simply the complement to the cDNA sequence (cDNA corresponds to mRNA except uracil replaces thymidine; cDNA and mRNA as "sense", so the complements of these molecules are "antisense"). Antisense RNA (or antisense "oligonucleotides") are described more fully in Molecular Biology and Biotechnology, Antisense Oligonucleotides, Structure and Function of, Uhlmann and Peyman, pp. 38-45 (Wiley-VCH, 1995). The antisense RNA of this invention is the complement, or a fragment, of the nucleotide sequence shown in FIGS. 1A-1D (SEQ ID NO: 1), FIG. 2 (SEQ ID NO: 2), and FIG. 3 (~~SEQ ID NO: 1, SEQ ID NO: 2 and~~ SEQ ID NO: 4), or an allelic variant thereof. If a fragment, the antisense RNA sequence should preferably have about 20, more preferably about 50 or more, nucleotides to allow binding to a complementary region of mRNA sufficient to inhibit protein biosynthesis.

Please replace the paragraph appearing at Page 23, lines 2-8, with the following paragraph:

The nucleotide sequence (SEQ. ID NO. 1) of the porcine leptin gene comprising 5917 base pairs, and the amino acid translation of the leptin coding sequences are depicted in FIGS. 1A-1D (~~SEQ. ID NO. 1~~). The nucleotide sequence (SEQ ID NO: 2) and the amino acid sequence (SEQ ID NO: 3) of the entire porcine leptin cDNA (i.e., signal peptide and secreted proteins) comprising 501 base pairs and 166 amino acids, respectively, are depicted in FIG. 2 (~~SEQ ID NO: 2 and SEQ ID NO: 3~~). The nucleotide sequence (SEQ ID NO: 4)and the amino acid sequence (SEQ ID NO: 5) of the porcine leptin cDNA corresponding to the secreted protein alone and comprising 435 base pairs and 145 amino acids, respectively, are depicted in FIG. 3 (~~SEQ ID NO: 4 and SEQ ID NO: 5~~).

Please replace the paragraph appearing at Page 23, lines 9-11, with the following paragraph:

There was an 83% identity between the pig (SEQ. ID NO. 1) and human (SEQ ID NO: 6) cDNA sequences and a 76% identity between the pig (SEQ. ID NO. 1) and mouse (SEQ ID NO: 7) cDNA sequences as depicted in FIG. 4.

Please replace the paragraph appearing at Page 25, lines 7-15, with the following paragraph:

> The 5917 bp Hind III fragment was subcloned into Bluescript II SK+ (Stratagene, Inc.). Both strands of the sequence was determined using progressive nested deletions using Exonuclease III and Mung Bean nuclease. Sequencing reactions were carried out with Sequenase V2.0. This sequence was 5917 bp in length and contains the entire coding region in two exons (Fig. 1, SEQ. ID NO. 1). There was 78.6% nucleotide identity between the pig and human as well as 71.2% nucleotide identity between pig and mouse coding sequences. The splice junctions for the two exons were confirmed by the cDNA sequence. The cDNA nucleotide sequence (SEQ ID NO: 2) and the amino acid translation (SEQ ID NO: 3) of the protein coding region of the entire porcine leptin cDNA (i.e., signal peptide and secreted protein) [[is]] are shown in FIG.2 (SEQ ID NO:2 and SEQ ID NO:3). The 501 bp sequences [[encodes]] encode the 166 amino acid residue leptin polypeptide with a predicted molecular mass of 18,334 Da.

Please replace the paragraph appearing at page 25, line 16, through page 26, line 1, with the following paragraph:

> A clone [[was]] obtained using the process above, Obg H3-15, was deposited with the American Type Culture Collection (ATCC)[[,]]~~12301 Parklawn Drive, Rockville, Md, 20852-1776~~[[,]] on July 11, 1996, and [[has been]] designated ATCC No. 97653. The current address (as of August, 2005) of the American Type Culture Collection is 10801 University Boulevard, Manassas, Virginia 20110-2209. This microorganism was deposited under the conditions of the Budapest Treaty on the International Recognition of Deposit of Microorganisms for the purpose of Patent Procedure. All restrictions on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent. This deposit will be maintained for a time period of 30 years from the date of deposit or 5 years after the last request for the material, whichever is longer.